

1. A camera comprising:
 - a body;
 - an electronic imager disposed in said body, said electronic imager capturing an ambient light image as a multicolored electronic image;
 - memory operatively connected to said imager, said memory storing said electronic image as a stored image;
 - a color adjuster including a user interface ambient light detector and a color balancer, said user interface ambient light detector having a light sensor mounted to said body, said user interface ambient light detector measuring ambient illumination to provide an ambient light color value, said color balancer generating a copy of said stored image and modifying color balance of said copy, responsive to said color value, to generate a compensated image;
 - an image display mounted on said body adjacent said sensor, said image display showing said compensated image; and
 - a switch having a first state actuating said color adjuster and a second state deactuating said color adjuster, said switch being switchable between said states independent of said imager.
2. The camera of claim 1 wherein said memory stores said compensated image while said switch is in said first state and discards said compensated image when said switch is in said second state.
3. The camera of claim 1 further comprising an optical system directing light to said imager, said optical system having a taking lens, said taking lens defining a taking lens opening, said sensor being closer to said image display than to said taking lens opening.
4. The camera of claim 1 wherein said detector measures said ambient illumination to provide said ambient light color value and an ambient

light luminance and said balancer modifies said electronic image responsive to said luminance.

5. The camera of claim 1 wherein said color balancer balances said stored image to a neutral balance for a scene illuminant having said color value.

6. The camera of claim 1 wherein said color adjuster includes a white balancing circuit determining a white balance color space vector defining a white balancing of said stored image from said color value to a white point for a predetermined scene illuminant; and a reversal circuit determining a reverse color space vector originating at said color value and extending opposite said white balance color space vector; and said compensated image is color balanced at a compensation point located on said reverse color space vector.

7. The camera of claim 1 wherein said color adjuster includes a look-up table disposed in said body, said look-up table having said color value assigned to one of said designated illuminant and one or more non-designated illuminants, each said non-designated illuminant having a color cast relative to said designated illuminant; and said compensated image has a color cast relative to said designated illuminant and relative to said illuminant assigned to said color value, when said illuminant assigned is one of said non-designated illuminants.

8. The camera of claim 1 further comprising an archival capture media color balanced to a designated illuminant.

9. The camera of claim 8 wherein said color adjuster includes a white balancing circuit determining a white balance color space vector defining a white balancing of said stored image from said color value to a white point for said designated illuminant; and a reversal circuit determining a reverse color

space vector originating at said color value and extending opposite said white balance color space vector; and said compensation image is color balanced at a compensation point located on said reverse color space vector.

10. The camera of claim 8 wherein said color adjuster includes a color detector, said color detector measuring said signal to provide a color value; said color adjuster includes a look-up table disposed in said body, said look-up table having said color value assigned to one of a designated illuminant and one or more non-designated illuminants, each said non-designated illuminant having a color cast relative to said designated illuminant; and said compensated image has a color cast relative to said designated illuminant and relative to said illuminant assigned to said color value, when said illuminant assigned is one of said non-designated illuminants.

11. A camera comprising:

a body;

an electronic imager disposed in said body, said electronic imager capturing an ambient light image as a multicolored electronic image;

an optical system directing light to said imager, said optical system having a taking lens, said taking lens defining a taking lens opening facing in a first direction;

memory operatively connected to said imager, said memory storing said electronic image as a stored image;

a color adjuster including a user interface ambient light detector and a color balancer, said user interface ambient light detector having a light sensor mounted to said body, said light sensor facing in a second direction different than said first direction, said user interface ambient light detector measuring ambient illumination to provide an ambient light color value, said color balancer generating a copy of said stored image and modifying color balance of said copy, responsive to said color value, to generate a compensated image;

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The figure consists of seven sub-diagrams labeled (a) through (g), showing the progression of an algorithm on a graph with 8 nodes and 10 edges. Red edges represent those currently in the tree or being considered.

- (a) Initial graph with all edges in black.
- (b) Edge e_7 is added to the tree (turns red).
- (c) Edge e_9 is added to the tree (turns red).
- (d) Edge e_{10} is added to the tree (turns red).
- (e) Edge e_8 is added to the tree (turns red). At this point, the tree contains 5 edges and has no cycles.
- (f) Edge e_6 is rejected because it would either create a cycle or result in a vertex with a degree greater than 2. It remains black.
- (g) Final Minimum Spanning Tree (MST) containing 5 edges: $e_7, e_9, e_{10}, e_8,$ and e_5 . All other edges (e_1, e_2, e_3, e_4, e_6) are rejected and remain black.

The figure consists of nine sub-diagrams labeled (a) through (i), each showing a graph with nodes and edges. The graphs are connected by arrows indicating a sequence of operations:

- (a) Initial graph with all edges.
- (b) Graph after removing edge e_1 .
- (c) Graph after removing edge e_2 .
- (d) Graph after removing edge e_3 .
- (e) Graph after removing edge e_4 .
- (f) Graph after removing edge e_5 .
- (g) Graph after removing edge e_6 .
- (h) Graph after removing edge e_7 .
- (i) Final Minimum Spanning Tree (MST).

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17. The method of claim 14 wherein said modifying is further characterized as color balancing said stored image to a neutral balance for a scene illuminant having said color value.

18. The method of claim 14 wherein said modifying further comprises determining a white balance color space vector defining a white balancing of said stored image from said color value to a white point for a predetermined scene illuminant; determining a reverse color space vector originating at said color value and extending opposite said white balance color space vector; and color balancing said copy at a compensation point located on said reverse color space vector.

19. The method of claim 18 wherein said compensation point is at the terminus of said reverse color space vector.

20. The method of claim 14 wherein said modifying further comprises matching said color value to one of a plurality of reference illuminants to provide an assigned reference illuminant, each said reference illuminant having a different correlated color temperature; and color balancing said copy to a neutral point at the correlated color temperature of said assigned reference illuminant to provide a verification image.